

**REMARKS**

At the time of the Office Action dated September 28, 2006, claims 1-19 were pending in this application. Applicants acknowledge, with appreciation, the Examiner's indication that claim 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In this Amendment, claims 5, 17, and 19 have been amended, and claims 9-16 cancelled, without prejudice, reserving right to prosecution in a continuing application. Care has been exercised to avoid the introduction of new matter. Specifically, claims 5 and 19 have been amended to improve wording, and claims 17 and 19 have been amended to be dependent on claim 1.

Now, claims 1-5 and 17-19 are active in this application.

**Information Disclosure Statement**

It is noted that an Information Disclosure Statement was filed on October 16, 2006, and another Information Disclosure Statement will be filed subsequent to this Amendment. Applicants respectfully request the Examiner to acknowledge receipt of the IDSs when reviewed and provide copies of the PTO-1449 forms appropriately initialed indicating consideration of the cited references.

**Claim Objections**

The Examiner pointed out that with respect to claims 17 and 19, the dependencies to claims 9 and 12 should be removed since claims 9 and 12 have been withdrawn from

consideration. In response, claims 17 and 19 have been amended to be dependent only on claim 1.

Claims 5 and 19 have also been objected to because each of these claims states a range as being a first value or more but a second value or less. Claims 5 and 19 have been amended to address the issues identified by the Examiner.

Applicants, therefore, respectfully solicit withdrawal of the objection to claims 5, 17, and 19, and favorable consideration thereof.

### **Specification**

The disclosure has been objected to because of informalities. In response, Applicants have amended the specification to address the Examiner's concerns. Withdrawal of the objection to the specification is, therefore, respectfully solicited.

### **Drawings**

The Examiner asserted that the drawings include reference numeral 2b which is not mentioned in the description. Applicants understand that the Examiner pointed to Fig. 1 which includes reference character 2b.

In response, Applicants invite the Examiner's attention to paragraph [0041] of the specification including the following sentence: "The outer diameter 2a of the core region is 7.9  $\mu\text{m}$  and the outer diameter 2b of the cladding region 125  $\mu\text{m}$ " (emphasis added). Reference number 2b is mentioned in the description.

Withdrawal of the objection to the drawings is, therefore, respectfully solicited.

**Claims 1-6 and 19 have been rejected under 35 U.S.C. §102(e) as being anticipated by Bickham et al.**

In the statement of the rejection, the Examiner asserted that Bickham et al. discloses a low slope dispersion shifted optical fiber identically corresponding to what is claimed. This rejection is respectfully traversed.

It is well established precedent that the factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of the claimed invention, such that the identically claimed invention is placed into the possession of one having ordinary skill in the art. *See Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F. 3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994).

Applicants submit that Bickham et al. do not disclose an optical fiber including all the limitations recited in independent claim 1. Specifically, Bickham et al. do not disclose, among other things, “a transmission loss of 0.32 dB/km or less at a wavelength of 1310 nm,” recited in claim 1.

To show that the above-mentioned limitation of claim 1 is taught by Bickham et al., the Examiner asserted that paragraph [0017] of Bickham et al. disclose as follows:

a transmission loss at 1380 nm is preferably less than about 0.1 dB/km (paragraph 0017), a transmission loss at 1310 nm being the same as the attenuation at 1380 nm or within 0.05 dB/km the transmission loss at 1380 nm or the transmission loss at 1380 is lower than the transmission loss at 1310 (paragraph 0017), ....

(see paragraph bridging pages 5 and 6 of the Office Action). It seems as if the Examiner stated that Bickham et al. teach a transmission loss of 0.1 dB/km or less at a wavelength of 1310 nm, as claimed. However, such assertion is apparently incorrect and inconsistent with paragraph [0017]

(see, also, Fig. 25 showing a graph of measured attenuation at various wavelengths for an optical fiber).

Bickham et al. in paragraph [0017] describe, “The attenuation of the optical waveguide fiber at a wavelength of about 1383 nm is preferably less than about 0.6 dB/km, more preferably less than about 0.5 dB/km, even more preferably less than about 0.4 dB/km.” Thus, Bickham et al. does not state that a transmission loss at 1380 nm is preferably less than about 0.1 dB/km, as asserted by the Examiner.

In addition, the paragraph continues to describe, “the attenuation at a wavelength of about 1383 nm is not more than about 0.1 dB/km higher than the attenuation at a wavelength of about 1310 nm.” It appears that the Examiner might rely on this sentence to assert that Bickham et al. disclose that a transmission loss at 1380 nm is preferably less than about 0.1 dB/km. However, this sentence does not suggest the assertion of the Examiner.

In short, paragraph [0017] of Bickham et al. describes that (1) the attenuation at the wavelength of 1383 nm is preferably less than about 0.6 dB/km, more preferably less than about 0.5 dB/km, even more preferably less than about 0.4 dB/km; and (2) the difference between the attenuation at the wavelength of 1383 nm and the attenuation at the wavelength of 1310 nm is preferably 0.1 dB/km, or 0.05 dB/km or less, or negative (the attenuation at the wavelength of 1383 nm is less than the attenuation at the wavelength of 1310 nm). Accordingly, it is apparent that Bickham et al. do not disclose a transmission loss of 0.32 dB/km or less at a wavelength of 1310 nm.

The above-described fundamental differences between the claimed invention and Bickham et al. undermine the factual determination that Bickham et al. identically describe the claimed invention of claim 1 within the meaning of 35 U.S.C. §102. Dependent claims 2-6 and

19 are also patentably distinguishable over Bickham et al. at least because these claims include all the limitations recited in independent claim 1. Applicants, therefore, submit that the imposed rejection of claims 1-6 and 19 under 35 U.S.C. §102(e) for lack of novelty as evidenced by Bickham et al. is not factually viable and, hence, respectfully solicit withdrawal thereof.

**Claim 8 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Bickham et al. in view of Sasaoka et al.; and claims 17 and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Bickham et al. in view of Kato et al.**

Each of the above rejections of claim 8 and of claims 17 and 18 is traversed.

Specifically, claims 8, 17, and 18 depend from independent claim 1. Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. §102(e) as evidenced by Bickham et al. The Examiner's additional comments and secondary reference to Sasaoka et al. and Kato et al. do not cure the previously argued deficiencies of Bickham et al.

Applicants, therefore, submit that the imposed rejection of claim 8 under 35 U.S.C. §103 for obviousness predicated upon Bickham et al. in view of Sasaoka et al., and the imposed rejection of claims 17 and 18 under 35 U.S.C. § 103 for obviousness predicated upon Bickham et al. in view of Kato et al., are not factually or legally viable and, hence, respectfully solicit withdrawal thereof.

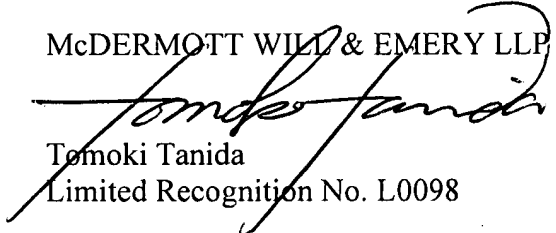
**Conclusion**

It should, therefore, be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Tomoki Tanida  
Limited Recognition No. L0098

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 AJS:TT  
Facsimile: 202.756.8087  
**Date: December 27, 2006**

**Please recognize our Customer No. 20277  
as our correspondence address.**